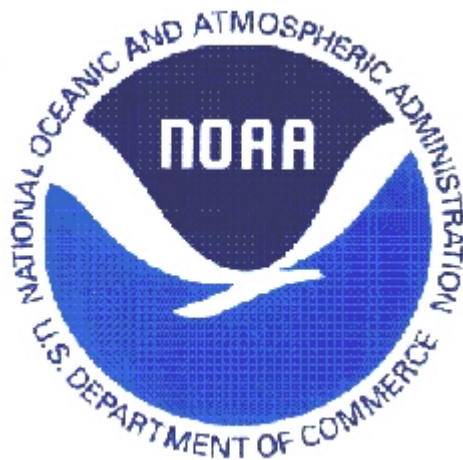




National Marine Fisheries Service
Galveston Laboratory
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Galveston, TX 77551
409-766-3500

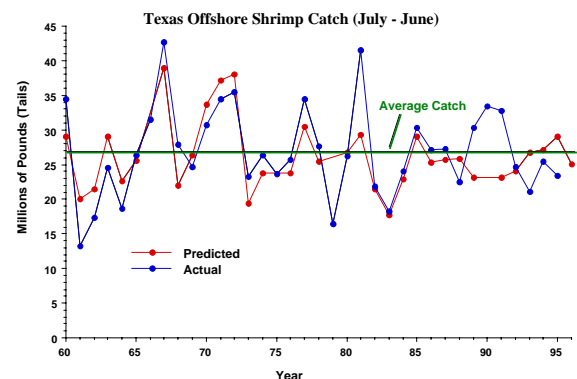


The NOAA National Marine Fisheries Galveston Laboratory provides scientific information for the management of commercial and recreational shellfish and finfish, conservation of coastal habitats, and protection of threatened and endangered species of the Gulf of Mexico. Fishery programs monitor commercial and recreational fishery yields and investigate reproduction, growth, survival, feeding, habitats, and migrations of shrimp, crab, and fish species. Protected species research is devoted to similar ecological studies on sea turtles in addition to investigations on physiology, behavior, strandings, and rehabilitation.



The Galveston Laboratory began in 1929 as a Bureau of Commercial Fisheries facility to study oysters. The present laboratory was established in 1950 on the site of the U.S. Army's Fort Crockett. The laboratory has 70 employees, occupies more than 55,000 square feet of research space, and has an annual budget of 3 million dollars. A 90,000 gallon flow-through seawater system supplies aquaria and raceways for research on marine animals. Laboratory staff conduct cooperative research and educational programs with Texas A&M University, the University of Texas, the University of Southwestern Louisiana, Louisiana State University, and Bradley University of Peoria, IL. These programs provide scientific and technical information for management of commercial and recreational fisheries, essential fisheries habitats, and protected species in the Gulf of Mexico, U.S. Atlantic, and Caribbean. Research at the laboratory has been supported by the Department of Energy, the Army Corps of Engineers, the Minerals Management Service, and the Environmental Protection Agency through

cooperative interagency agreements to study human effects on living marine resources. The laboratory's research staff also extends their expertise through teaching and advising undergraduate and graduate students. Numerous Master and Doctoral degrees have been earned under the guidance of staff scientists.



Since 1960, information on shrimp fishery landings in the Gulf of Mexico has been collected by port agents and stored at the Galveston Laboratory. Data on the number of vessels, hours fished, and pounds of shrimp landed is used to manage the shrimp fishery in cooperation with the Gulf of Mexico Fisheries Management Council and the Gulf coast states. The laboratory issues annual forecasts of brown shrimp yields in the western Gulf of Mexico. Since 1960, the laboratory's predicted yield of brown shrimp has been within three percent of the actual catch. Such information allows the fishing industry to prepare their fishing operations for good, bad, or average years. The laboratory also monitors the pink shrimp fishery in Florida. Yields of pink shrimp are forecast using landings data, weather data and hydrologic information from Everglades National Park. The linkage between declining pink shrimp landings and the die-off of Florida Bay seagrasses is being studied.



Fishery ecology research is directed toward a more complete understanding of the functional ecology of estuarine habitats such as seagrasses, salt marshes, and mangroves. We are examining the linkages between these habitats and production of commercially important fishes, crabs, and shrimps. This information is used to identify coastal habitats that are essential for maintaining productive fisheries so that these areas can be conserved and protected. We are also conducting research on the ecological value of restored and created habitats and developing design criteria for these habitats to maximize their value for fishery species.

The Galveston Laboratory is perhaps best known for its work on captive-rearing of sea turtles.



Thousands of people visit our rearing and rehabilitation facilities for these protected species each year. Kemp's ridley hatchlings obtained from Mexico and loggerhead hatchlings obtained from Florida are captive-reared for up to two years, used in research, and then released into the Gulf of Mexico. During the period from 1978 to 1997,

23,276 Kemp's ridleys and 1,114 loggerheads were reared, tagged, and released. Tag returns from these releases have been reported from the Gulf of Mexico, the U.S. Atlantic Coast, France, and Morocco. Growth and migration studies of captive-reared turtles indicate that they adapt well to conditions in the wild and are found distributed throughout the natural range of the species. Injured or sick sea turtles found in the wild also are treated and rehabilitated at the laboratory and then released back into the wild. In addition, the laboratory participates in NOAA's Sea Turtle Stranding and Salvage Network and Marine Mammal Stranding Network, and it coordinates efforts with the United States Coast Guard to document concentrations of fishing vessels in relation to sea turtle strandings.

Laboratory scientists have tracked sea turtles using radio, sonic, and satellite transmitters in order to determine their movements, distribution, habitat preferences, diving patterns, and behavior.



Data collected are used in conjunction with a Geographic Information System to determine habitat needs and to assess interactions with

human activities such as channel dredging, trawl fishing, and offshore oil and gas activities.

The explosive removal of non-producing oil and gas structures in the Gulf of Mexico is monitored by Galveston Laboratory observers in order to prevent damage to protected species such as sea turtles



and marine mammals. The impact on the resident fish populations is assessed once the platform is removed.

Observers are also placed onboard vessels to



document the take of non-targeted and protected species by the trawl, longline, gill net, and trap fisheries. Alternative fishing gear to reduce this "bycatch" is also tested by Galveston Laboratory observers.

Free tours of the turtle rearing and rehabilitation facilities are conducted on Tuesdays, Thursdays, and Saturdays at 10:00 a.m., 11:00 a.m., 1:00 p.m., and 2:00 p.m. To schedule a tour or obtain information about the facility call (409)766-3670. Visit our web site at <http://galveston.ssp.nmfs.gov> for more information about the laboratory.

